

## Quarterly Progress Report

<b>Project Title:</b>	<b>Computer Modeling and Simulation of New Jersey Signalized Highways - Year II</b>		
<b>RFP Number:</b> 2001-01	<b>NJDOT Research Project Manager:</b> Karl Brodtman, NJDOT		
<b>Task Order Number/Study Number:</b> 32	<b>Principal Investigator:</b> Chien, Steven I-Jy		
<b>Period Starting:</b> 1/1/02 - 12/31/03 (Start-End Date of Study)	<b>Period Ending:</b> 09/02/2003		

Task	% of Total	% of Task this quarter	% of Task to date	% of Total Complete
Review of Literature and Current Practice	4	0	100	3.8
Prototype Development	10	0	95	9.5
Site Identification and Data Collection Needs	10	0	100	10
Data Collection	15	0	100	15
Network Modeling with SYNCHRO and CORSIM	15	10	80	12
Optimization of Signal Timing Plan with SYNCHRO and CORSIM	20	10	80	16
Generation of Traffic Signal Directives	10	45	50	5
Development of Tutorial for the NJDOT Engineers in the SYNCHRO Environment	8	10	15	1.2
Final Report with Documentation of SYNCHRO Models	8	0	30	2.4
Final Report				
<b>TOTAL</b>	<b>100 %</b>			<b>74.9 %</b>

### 1. Progress this quarter by task:

A model of the optimized intersection was developed for Route 23. The results of the optimization have been summarized and are being prepared for approval by NJDOT. These results were also added to the Route 23 summary report that should be completed by the end of September. The first pass timing directives were also created and will be provided and checked by NJDOT in the first weeks of September. The base model was developed for Route 42/322 and was submitted to NJDOT on August 20th, 2003, during a technical meeting. Traffic count data provided by Louis Berger and Associates was entered and was "balanced" where appropriate. The additional information requested by NJIT for Route 42/322 prior to finalizing the base model was entered.

### 2. Proposed activities for next quarter by task:

1. Validate the Route 42/322 base model in Synchro. 2. Finalize timing directives and draft report for the Route 23 optimization. 3. Commence optimization of the Route 42/322 model.

### 3. List of deliverables provided in this quarter by task (product date):

SYNCHRO 5.0 Networks (Rt 23 and Rt 42/322)

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### 4. Progress on implementation and training activities:

none yet

### 5. Problems/proposed solutions:

none yet

### 6. Budget summary:

Total Project Budget (# Years)	2 Year	\$222,078.00
Total Project Expenditure to date		\$155,456.00
% of Total Project Budget Expended		70.00%
Task Order Number/ Study Number	2 Year	32
Current Task Order Budget (# of Years)		\$72,493.00
Actual Expenditure to Date Against Current Task Order		\$66,622.00
% of Current Task Order Budget Expended		91.90%